especially tor folding papers containing homeopathic powders, or for folding and filling papers with seidilitz powders, but by varying the size of the parts which receive the papers and fold them, the machine may be adapted for folding large or small papers of powder.]
1,639.-George Parr, of Buffalo, N. Y., for an Improved Camp Chest :
 for holding the legs in a pe
substantially as described.
1,640.-R. H. Peck and E. M. Gifford, of Wolcott, Vt., for Improved Tube and Pail Machine
We claim the arrangement of the mandrel, $G$, the swinging frame,
$\mathbf{H}$, carrying the knives, $h$ and $h$, the clamp, F , L , and the rests, I and 1,641.-C. H. Perkins, of Providence, R. I., for Improved Machine for Making Horse Shoes
I clain, first, The combination and arrangement of afseparate ham-
mer and creaser with a single helve, so that while one sis at a state of
rest and disconnected from the helve, the other shall be connected rest and disconnected from the helve, the other shall be connected
therewith and caaple of beng operated by it independently of the
other, substantially as described. Second, I claim the use of a separate hammer and creaser capable
of acting independently of each other in combination with the in-
struments structing independently of each other $1 n$ combination with the in in
described described.
Third, I claim constructing the face of the hammer with a raised
rim, as described, for the purpose of giving shape to the shoe and also Or facilitating the escape of the scale as it is iormed.
Fourth, I claim the combination of the prongs, 26, and scraper, 27,
or their equivalents, for the purpose of removing the shoe after it has or their equivalents, for the purpose of removing the shoe arter it has
been finished, applied and operated substantially as described.
Fifth, I claim the mode of operation substantially as specified, by Fith, I claim the mode of operation substantially as specified, by
means of which the prop is removed from the hammer helve to permit the operations of plating and creasing the shoe to be performed, and
at such times relatively to the revolution of the wild-cat as to preven at such times relatively to the revolution of
a half blow from the hammer, as set forth.
1,642.-T. W. Porter, of Bangor, Maine, for an Improvement in Ox-Yokes :
I claim, first, The'pieces, A and B, in the construction of ox-yokes,
when arranged substantially as described,
Second, I claim forming the ends of yokes of two or more layers wood, the grain or fiber of one or more layer or layers being placed
transversely t that of the other or others substantially as described. neck of the ox, by bending the wood so that the whirh bears upon the
of the grain or fiber shall conform to the curvature of said part of the
yoke.
Fourth. I claim the bow holder, or pin, when used in combination
with the yoke substantially as described and for the purpose specified. 1,643.-J. A. Preston, of Boston, Mass., for an Improve ment in Bottle Stoppers :
I claim a bottle stopper made with its valve and valve stem entirely
1,644.-George Race, of Norwich, N. Y., for an Improve ment in Wa.ter Elevators
 subtantially as and for the purpose set forth. I further claim the particular arrangement of the spring, F, substan-
thally as shown and described, whereby the spring, E, is made to per-
form the double function of a friction brake and spring, as set forth. [The object of this invention is to obtain a water-elevating device which will admit of being operated with greater facility than usual. The invention relates to that class of water elevators in which a wind lass and bucket are employed, and consists in the employment or use of a ratchet placed level on the windlass shaft, in connection with a hheel attached permanently to the wmdlass shaft, and encased within barrer attached to the rachet, said wheel being acted upon by a phing and an eccentric and brake, whereby the bucket may be elevat in the well as gradually as may be desired, and suddenly stopped at any desired point, the descent of the bucket being under the perfec ontrol of the operator.]
1,645.-George M. Rhoades, of Hamilton, N. Y., for Im provement in Machines for Trimming Teasels
I claim, first, The employment of a revolving tube, c, provided with
ne or more teeth as described, and for the purposes set forth. Second, Surrounding tube,, , with an adjustable outer tube, $I$, sub
tantiaily in the manner and for the purposes set forth. Third, Retaining the outer tube, I, at any desired degree of elevation
by means of check nuts, H, and springs, F, in, combination with rods,
g, substantially as represented and described. 1,646.-W. B. Rhoades, of South Dedham, Mass., for Improved Clothes Wringer :
I claim the rolls $\mathbf{B}$ and $\mathbf{C}$, with the sliding bearings, $g$, in combination
ith the levers, $D$, and springs, $k$, arranged and operating substantially with the leve
as set forth.
1,647.-N. H. Richardson, of Fitchburg, Mass, for Improved Ratan Machine :
Raim, first, The rolls, K,in combination with the rolls, $H$, upon the
( clasite side, of the scrapers, when the former, $K$, are of slightly
se ex-
Second, I claim so connecting the scrapers with the feed rolls in ad vance of them by means of the connections described, or their sub-
stantial equivalents, that they shall be simultaneonsly separated for
the entrance of the ratan, as set forth for the parpose described. 1,648.-C. W. Saladee, of Pine Island, Texas, for an Im-
Plaim, frrst, The combination of the several parts shown and de-
scribed, for the purpose of combining in one machine the facilities of
plowing, sowing the seed, rolling and harrowing at one operation, as ell as to perform either of these objects separate and apart from the others.
Second, I claim the peculiar construction and arrangement of the
plows, $\mathbf{x}$, and colters, $Y$, Fig. 1 , in combination with the angle iron
 beyond the line or circle described by the points of the plows, in the
manner and for the important purpose set forth.
Fourth, I clanm the radius bars, o O, Fig. 1, but more particularly
show in Fig, 3hat, $\mathrm{Q} Q$, shifting pinions, S , in combination with he crankshaft, L , and revolving drums, C C, for the purpose of regu
ating the advee of the machine in propertion to the cut made upon theground at each revolution of the plows, and for the additional pur-
pose of throwing out of gear either one or both of the drums, $\mathbf{C}$ c, to
facilitate the turning of the machine as shown and described. 1,649.-Herman Schroder, of New York City, for an Improvement in Breech-loading Firearms
Provement The movable b reech pin, $F$, when operating as de-
cribed to cock $k$ the lock and loc $k$ the barrel. scribed to cock the lock an lock the barrel.
Second, The movable breech pin, operating as described, in combin-
ation with the expansive annular charge chamber, $f$, as and for the purpose specified.

1,650.-Wm. F. Sheldon, of East Mendon, N. Y., for an Improvement in Melodeons:
melodeon, or the equavalent parts of so combined other with ithe reeds of a
the aid of a fixed scale, it may that, by
te set to play in different keys, substantially as speeified.
Second, Combining the so-applied movable keyboard with the reeds,
ortheir equivalent, by means of interposed levers, $L$, applied and operating substantially as specified. applied in combination with the
Third, The horizontal screw, M,
movable keyboard, substantially as described, to adjust it to or hold it movable keyboard, sub
1,651.-M. A. Shepard, of Bridgeport, Ill., for an Improvement in Water Elevators : divided into two compart-
I claim an oscillating or swinging box, $\mathbf{c}$, dive
ed into compartments, e $e^{\prime}$, by partitions, ff $f^{\prime}$, the compartments, e
${ }^{\prime}$, communicating with each other by openings, $g$, $\boldsymbol{y}^{\prime}$, and all arranged
operate substantially as and for the purpose set forth. operate substantially as and for the purpose set fort
[The object of this invention is to obtain a simple device for elevating water and other substances, either by the oscillating of the device he device is attached. The invention is applicable to vessels of navition, serving, while the vessel is in motion, as a self-acting means elevating water from the hold.]

1,652.-D. H. Shirley, of Boston, Mass., for an Improvement in Skates
I claim, first, The arrangement of the screw box to the heel-locking shown and described.
Second Securing the skate at the heel by the button or head of the Second, Securing the skate at the heel by the button or head of the
heel screw, arranged and applied to gripe on or against the heel of the
 in the body of the skate in front of the heel, and
spikesto gear with the front of the heel or the boot or shoe, substan-
tially as specified.
Fourth, The combination of the heel-locking screw, spiked set-off or Fourth, The combination of the heel-locking screw, spiked set-off or
step to the body in front of the heel, and toe cap, all for operation to-
eether, essentially as set forth. 1,653.-H. T. Stanard, of Wayne, Mich., for an Improvement in Sash-holders:
I claim the cam, $H$, lever, $L$, and elastic substance, $F$, all arranged
nd operating as specified,
1,654.-Leopold Thomas, of Allegheny, Pa., for an Im-
I claim attaching the piston rod of lifting pumps, by which the plun-
er is operated, to the upper valve itselt; in such a manner as that the first part of the motion of the piston rod, either on its up or down
stroke, shall be to open or close the valve as the case may be whil stroke, shal be to open or close the valve, as the case may be, while
the plunger itself is moved by the further stroke of the piston rod, sub
stantially in the manner described stantially in the manner described.
1,655.-J. A. Whitney, of Maryland, N. Y., for an Improve ment in Brakes for Vehicles
 perated by the may
scribed and shown.
[This invention relates to an improvement in operating wagon rakes, either by hand or by the movement communicated to them b he rise and fall of the draft pole.]
1,656.-W. F. Wickersham, of St. Louis, Mo., for an Im proved Excavating Machine
I claim the arrangement and
I claim the arrangement and combination of the frame, $C$, the eleva-
tor,, , the leader, $P$, the scraper, $J$, and the cart, $M$, the whole to be
constructed jointly, substantially in the manner descibed for constructed jointly, substantially in the manner described for the pur 1,657.-M. D. Wilder, of Laporte, Ind., for an ImproveI claim, first, The carriage, C, placed on a circular track,, in con-
ection with the annular a pron, $D$, frame, $J$, fence, $K$, and pump ormed of the reciprocating tube, Q,'plunger, R, and cylinder, $\mathbb{S}$. the ally as and for the purpose set forth.
Second, The arrangement, as shown, of the annular trough, $L$,
staight trough,, , and stationary curved discharge pipe, $V$, whereby
he water is discharged into the straight trough, $M$, the motion of the trough not interfering with the proper delivery of the water.
Third, The arrangement of the shaft, E, crank pulley, F, connect
. ing rod, $\mathbf{P}$, collar, , , and rotating tube, $\mathbf{H}$, subustantially as shown, to
erve as a means for communicating power from the carriage, $\mathbf{C}$, to the pump.
Fourth the employment or use of the decoy vessel, N , when used in
connection with a pump and its operating mechanism, substantially as connection with a pump and it
[This invention relates to a new and improved water-elevating de vice, by which stock may raise their own water, and to which a horse ists in the use of an and track, in connection with a fence and pump, all arranged to effect the desired end.J
,658.-J. D. Custer, of Norristown, Pa., assignor to Wm
McNiece, of Conshohocken, Pa., for an Improvement
in Cutting Saw Teeth:
 1,659.-J. E. Earle, of Brooklyn, N. Y., assignor to himself and Samuel Hathaway, of New York City, for an
Improvement in Machines for Making Tape Trimmings:
I claim the folders, D E F G and H. or their equivalents, constructed
and operating in the manner and for the purpose substantially as specified.
Also, the combination described of folding!instruments, D E F G and
H, the pressers, $\mathbf{E}^{\prime}$ and $\mathrm{F}^{\prime}$, and the conti nuously rotating spool-holder, H, the pressers, $\mathrm{E}^{\prime}$ and $\mathrm{F}^{\prime}$, and the contin nously rotating spool-holder,
$\mathrm{H}^{\prime}$, all constructed and operating together in the manner and for the purpose set forth.
Also, in combination with a folding instrument, operating substan.
tially as described, the carrier, $D^{\prime}$, rotating therewith, for the purpose Also, in combination with a folding instrument, $\mathbf{D}$, and carrier, $\mathbf{D}^{\prime}$,
Alder, $\mathbf{C}^{\prime}$, operating in the manner and for the purpose specified. 1,660.-D. R. Gamble (assignor to himself and J. M. Con-
nel), of Newark, Ohio, for an Improved Washing Machine
I claim the special arrangement of the roller or balls, $a^{\prime} b^{\prime}$, with the evolving arms, in combination with the ribs or projections, $g$, upon
he side and bottom of the tub and cover, when used and operating for 661 W.
1,661.-W. R. Kay and H. E. Kay, of Westerly, R. I., as-
signors to themselves and B. D. Kay, of Fall River,
Mass., for an Improved Car Brake :
We claim, first, The brake wheel $\mathbf{D}$, drum,
e
We claim, first, The brake wheel, D, drum, C, and axle, b, so com-
ined and connected, by means or suitable, gearing, substantially as bined and connected, by means of suitable gearing, substantially as
described, that when the brake is applied to the brake wheel., D, the
drum, , is cased to turn in a direction opposito that of the axle,
and thereby to wind up the spring Li, or its equyalent, substantially
 Second, We claim the ratchet levers, $P$ and $P^{\prime}$, in combination with
he pawls, $N$ and $N^{\prime}$ and chain, $H$, or Its equivalent, so arranged that
he winding of the chain on the drum, $\mathbf{C}$, in either direction bringsinto lay the proper pawl, as set forth.
Third, We claim the multionted strap, $\mathrm{R} Z$, in combination with the
pring, U, levers, $V$ and $V$ ' ${ }^{\prime}$, and link, v , the whole operating together substantially as and for the purpose specified.
Fourth, We claim the combination of the toggle, $W W$, the levers, V
and $V^{t}$, the tie, v , and the jointed or flexible strap, R , substantially as 1,662.-William Lape (assignor to himself and Fred'k R. Stow), of Troy, N. Y., for an Improvement in Plows : I claim a plow having its landside, $A$, share, $B$, moldboard, $C$, and
eam, $\mathbf{D}$, all constructed and united together in the manner shown and
1,663.-W. G. Mackay, of New York City, asssignor to P
P. Comen, of Bridgefield, Conn., for a Machine for

Bronzing Wall Paper, \&c.:
I claim the arrangement of the trough, $\mathbf{C}$, bronze distributor, $\mathbf{E}$,
whipping plate, $\mathbf{H}$, and endess apron,, , when arranged and operated
in the manner described, and forthe purpose specified
In combination with the same I claim the whipping plates, $\mathbf{K} \mathbf{K}$,
when arranged and operated in the manner described and for the pur-
1,664.-J. W. Osborne, of Melbourne, England, assigno
to S. T. Hooper, of Charlestown, Mass., for an Im-
prqvement in Photography :




1,665.-G. W. Richardson (assignor to himself and Robert Glover), of Grayville, Ill., for an Improvement in Harvesters:
I claim the arrangement and combination of the bracket frame. G,
draft pole, A, and driver's seat, S, with the gearing, D E O N, and
shaft, M, substantially as and for the purpose set forth. ['The object of this invention is to obtain a simple and efficient ar rangement of parts to render the draft of the machine as light as possible, and, at the same time, admit of a very ready raising and lower ing of the cutting device.]
666.-G. H. Smith (assignor to S. O. Smith), of Roches ter, N. Y., for an Improvement in Gas Regulators : I clair, first, The employment in portable gas regulators, of a long
ylindrical valve, operating as described, and moved longitudinally by means of the back pressure of the gas upon an overcharged cushion
confined air, to the covering of which the valve is connected. Second, Attaching the valle to one leaf of a double diaphragm, or to
ring of rubber attached to the single diaphragm, substantially as and or the purposes set forth.
1,667.-Wm. F. Trowbridge (assignor to F. Bingham• \&
Co.), of Feltonville, Mass., for an Improved Machine for Skiving Boot and Shoe Soles:
I claim the skiving machine consisting essentially of the revolving
cutter head, F , and adjustable collar, K , arranged and operating sub-
stantially as described. Re-ISSUES.
98.-Wm. N. Whiteley, Jr., of Springfield, Ohio, for an Im provement in combination with the main ground wheel frame of
claim, first, In
 able boxes, $\mathrm{g}^{\prime} \mathrm{g}^{\prime}$, or their equivale
scribed, for thepurposesspecified.
Second, In
Second, In combination with the sector plate, f, a projecting lip for
the shipper's fulcrum pin, substantially such as shown and described, the shipper's fulcrum pin, substantially such as shown and described,
for the purposes specified.
Third, Retaining the pinion on its shaft by means of the shipper, or its equivalent, by which said pinion is thrown in and out of connection
with its clutch pin substantially as shown and described, for the purpose stated.
Fourth, . connecing or combining the driver's seat of harvesting
machines with the front end of the frame of the same, when used for machines with the front end of the frame of the same, when used for
reaping, that when the driver is on his seat his weight will either raise
and hold up the rear end of the wheel and hold up the rear end of the wheel frame to which the cutting ap. paratus is connected, or both the rear end of
of the finger bar, for the purposes specified.

DESIGNS.
8.-C. S. Chaffee (assignor to the Bay State Glass Company), of East Cambridge, Mass., for a Design for
-H. W. Hayden, of Waterbury, Conn., for a Design for a Mat for Daguerreotype Cases.
70.-James Hutchinson (assignor to J. E. Whipple), of Lansingburgh, N. Y., for a Design for an Oilcloth Pattern.
lor) - Mames McDuff (assignor to N. McGraw and W. A. Tay
lor), of Morrisania, N. Y., for a Design for Coffins.

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